CLAIMS

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1	1. A welding power supply having a start control,		
2	comprising:		
3 .	a source of welding power, having at least one power control		
4	input, and disposed to provide welding power to an arc;		
5	a wire feeder, having a feeder control input, and disposed to		
6	supply wire to the arc; and		
7	a controller, having a wire feed control output connected to the		
8	feeder control input, and further having a power source control output,		
9	connected to the power control input, and further having a wire feed delay		
10	module, having as an input a user trigger signal, and having as an output the		
11	wire feed control output and the power source control output.		
1	2. The welding power supply of claim 1, wherein the wire feed		
2	delay module provides a wire feed delay of 20 milliseconds.		
1	3. The welding power supply of claim 1, wherein the welding		
2	power is provided to the arc through the wire feeder.		
1	4. The welding power supply of claim 1, wherein the controller		
2	further includes a pulse module, which provides the wire feed speed output and the		
3	power control output for MIG welding, after the start of the operation of the wire feed		
4	delay module.		
1	5. The welding power supply of claim 1, wherein the controller		
2	further includes a pulse module, which provides the wire feed speed output and the		
3	power control output for pulse welding, after the start of the operation of the wire		
4.	feed delay module.		
1	6. The welding power supply of claim 5, wherein the controller		
2	further includes a CC module, which provides the wire feed speed output and the		

3	power control output, after the start of the operation of the wire feed delay module,		
4	and before the operation of the pulse module.		
1	7. The welding power supply of claim 6, wherein the controller		
2	further includes a CV module, which provides the wire feed speed output and the		
3	power control output after the operation of the CC module, and before the operation		
4	of the pulse module.		
1	8. The welding power supply of claim 4, wherein the controller		
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2	further includes a run-in module, which provides the wire feed speed output and the		
3	power control output after the start of the operation of the delay module, and before		
4	the operation of the pulse module.		
1	9. The welding power supply of claim 1, wherein the wire feed		
2	delay module includes a feedback circuit input indicative of the presence or absence		
3	of an output open circuit, and terminate the operation of the wire feed delay module		
4	in response to an open circuit.		
1	10. A welding power supply having a start control,		
2	comprising:		
3	means for providing welding power to an arc in response to at		
4	least one power control input;		
5	means for feeding wire to the arc in response to a feeder control		
6	input; and		
7	means for controlling the means for feeding wire and the means		
8	for providing power, connected to the feeder control input and the power		
9	control input, and having a means for delaying the feeding of wire and		
- 10	providing output power in response to a user trigger signal.		
1	11. The welding power supply of claim 10, wherein the delay		
2	module provides a delay of 20 milliseconds.		
1	12. The welding power supply of claim 10, wherein the welding		
2			
L	power is provided to the arc through the means for feeding.		

1	13. The welding power supply of claim 12, wherein the means for		
2 .	controlling further includes a means for providing MIG control after the start of the		
3	operation of the means for delaying.		
1	14. The welding power supply of claim 12, wherein the means for		
2	controlling further includes a means for providing pulse control after the start of the		
3	operation of the means for delaying.		
1	15. The welding power supply of claim 14, wherein the means for		
2	controlling further includes a means for providing CC control after the start of the		
3	operation of the means for delaying, and before the operation of the means for		
4	providing pulse control.		
1	16. The welding power supply of claim 15, wherein the means for		
2	controlling further includes a means for providing CV control after the operation of		
3	the means for providing CC control, and before the operation of the means for		
4	providing pulse control.		
1	17. The welding power supply of claim 16, wherein the means for		
2	controlling further includes a means for providing run-in control after the start of the		
3	operation of the means for delaying, and before the operation of the means for		
4	providing pulse control.		
1	18. The welding power supply of claim 11, wherein the means for		
2	delaying includes means for terminating the operation of the means for delaying in		
3	response to an open circuit.		
1	19. A method of providing welding power with a start		
2	control, comprising:		
3	sensing a user trigger signal indicating a desire to start the		
4	welding process;		
5	upon the sensing, delaying feeding wire to an arc;		
6	upon the sensing, providing power to the arc; and		

7	a	fter delaying, feeding wire to the arc.
1	20. Т	The method of claim 19, wherein the delay is 20 milliseconds.
1	21. T	The method claim 19, wherein the welding power is provided to
2	the arc through the wire	e feeder.
1	22. Т	The method of claim 19, including providing pulse power after
2	the start of the delay.	
1	23.	The method of claim 22, further providing CC power after the
2	start of the delay and be	efore providing pulse power.
1	24.	The method of claim 23, further providing CV power after
2	providing CC power ar	nd before providing pulse power.
1	25.	The method of claim 22, further comprising feeding wire at a
2	run in speed after the s	tart of the delay and before providing pulse power.
1	26. T	The method of claim 19, wherein the delay is terminated when
2	an open circuit at the a	rc is sensed.
1	27. 1	The method of claim 19, including providing MIG power after
2	the start of the delay.	
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